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THE ORGANIZATION OF INDUSTRIAL ZONES

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THE ORGANIZATION OF INDUSTRIAL ZONES

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SUMMARY

The organisation of zones destined to accommodate new industries is of great interest for the economic development of communities. Contractors are attracted by the minimizing of costs and delays and removal of red-tape and clerical work allowed by these new measures. Communities may select the activities best suited to the possibilities and needs of their members. Between the two sides, a balance is established, which is a token of durability. This is particularly important for countries in process of development.

However, the planning of industrial zones should be illuminated by accurate analyses. These investigations will make it possible to steer clear of political considerations, pressure groups, or haphazard measures.

Preliminary studies for the planning of industrial zones

These aim to bring to light factors which may influence the location of new industries in the centres under survey. These factors are of different categories:

Technical: 1. Climatology: temperatures, precipitation, hydrometry.

2. Local raw material: produce of soil and sub-soil, industrial products and services.

3. Geographical position in relation to the principal raw materials for industry.

4. Means of transport, by road, railway, waterway and air.

5. Labour: availability in number and in quality.

6. Power: electricity, gas, petroleum products.
7. Water: drinking and industrial.
8. Possibilities of treatment of residues, solid and liquid.
9. Public services: fire fighting, police, public warehouses, etc.

Economic:

1. Local markets.
2. Geographic position in relation to main markets.
3. Cost of transport by road, railway, waterway and air.
4. Wages per trade.
5. Unit rate for power.
6. Water rate.
7. Cost of residue treatment.
8. Cost of insurances.
9. Local taxation.
10. Cost of industrial services.
11. Building costs.
12. Local financing possibilities.
13. Actual rates of interest allowed by local lenders.

A large number of these data are themselves the reflection of sociological factors which should be analysed: demography, attitude of the community towards the industrialists, structure of existing industries, experience of local contractors, relation between capital and labour, housing, amenities of residential zones, cost of living, local budget, health, social, cultural, commercial and touristic services.

It is advisable, moreover, to extrapolate the results of these researches onto a foreseeable future, covering about ten years. For this, government plans and projects will be used, as well as estimates made by Companies concerned, the sociological observations referred to above and, mainly, the views of the leaders and those in authority.

Thus will emerge the factors capable of influencing the planning of industrial sites: for instance: the availability of qualified labour may make it possible to manufacture machinery, the proximity of markets may mean the installation of a bottling plant and the availability of timber and water may influence the siting of a paper mill, etc. After this preliminary choice, it will be necessary to define the magnitude of the possible development, within the district, of the industries thus chosen. For this purpose, the national prospects should be weighed by consideration of the proportion of the planning factors referred to above,

within the community, in relation to the other cities or regions under review. Thus, for the branches and production capacities selected, estimates could be prepared for the community under analysis and for the principal competing towns. This will allow for the compilation of a list showing, in decreasing order of merit, the industries which could be introduced in the locality.

If some bottlenecks appear as to vocational training, housing or public investments, an amenities programme will be planned Such a plan is, anyhow, always useful, if not essential, for synchronizing the necessary operations. It should clearly define its incidence on local taxation, financing possibilities and labour. All these investigations will lead to the stage when plans can be put into practice.

Planning of industrial zones:

First should be defined the land areas suitable for the prospective industries. Rather than transpose more or less arbitrarily the experience of already-established industries, it will be preferable to compute, for each type of factory, the area necessary for its different activities: transport, storage, production, etc.

The areas thus computed will be compared to the land available for factory construction at non-prohibitive prices. To this end, to the estimates already calculated must be added the incidence of the land rents on the annual general charges. These analyses will bring to light the activities best-suited to the community under consideration. They will have necessitated the computing, at least approximately, of the cost of the zones already equipped and the distribution of the factories among them. For this micro-localization urban requirements should be kept in mind, such as prevailing winds and nuisances; economic factors, such as inter-industrial relations, transport, and services. Generally, the least attractive sites will be offered to those firms which will be most favoured by their introduction to the locality.

It will be necessary to enact definite by-laws for the utilization of each zone: industries authorized, aspect, site, and height of structures, car parks, green spaces, etc. Thus, the interests of residents and of all users will be protected. Further, it will be possible to plan common services: construction of buildings, maintenance, heating, social activities, etc.

Conclusion

A twofold survey appears necessary. In order to specify the branches which will have their optimum site in the district under consideration, it is advisable to proceed by comparative analyses: i.e. to entrust an organisation, private or public, which will intervene in this study on a national scale. Finally, as these researches cannot be confined to industrial lands alone, they must lead to a general programme of amenities for the community under survey.

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